

Hi,

http://money.cnn.com/2006/11/26/news/international/nissan_electric.reut/index.htm?postversion=2006112609

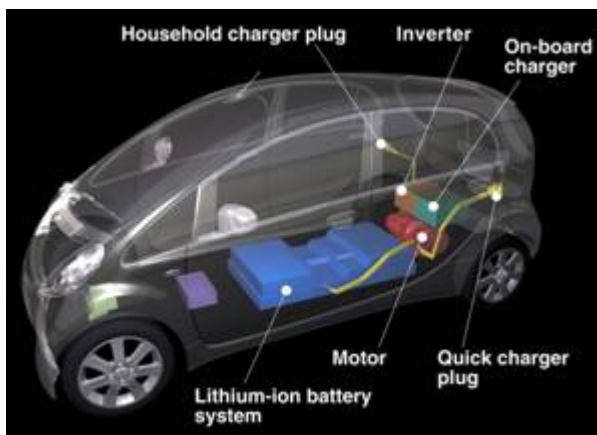
The above URL will bring you to Nissan's announcement. Below a picture of Mitsubishi all-electric vehicle on the market by 2009. Toyota is in fact way ahead of both Nissan and Mitsubishi. My prediction based on technology innovation roadmap is that the Japanese will "reduce" fossil liquid fuel consumption with all-electric vehicles for up to 150 miles daily commute; if they are recharged at the office building using solar panels, then their driving range could extend by 50% daily. When back in their home garage they will use night-time low-cost electricity generated by combined-cycle power plants from natural gas. Technically speaking, by putting in a very small internal combustion engine (ICE) of 600 cc that using E85 beside the electric motor, these EV-now enabled with ICE, range of commute will only be limited to the size of the liquid fuel tank.

Concurrently, the current gasoline-electric hybrids are already bringing 50% reduction in fossil liquid fuel consumption. I have done another email to Earl for internalizing some numbers that the US could be self-sufficient in E85 by 2025 for 260 million cars and traveling up to 26,000 km yearly.

If my predictions are right, both GM and Ford will be history in the next 30 years – even if they could survive, they will still be doing that catching up game. Ironically, the very idea of plug-in hybrid technology of up to 60 miles on all-electric range came from an American Professor Andy Frank based at UC Davis, California.

Picture attached when I (3rd standing from left, 1st row) chaired a symposium in Singapore with Professor Andy Frank (4th standing from left, 1st row) from UC Davis.

As an engineer, Sustainability does not mean that we need to go back to horse-pulling wagons, with ingenuity and the right development and application of technologies; we could sustain better living with good environmental care.



Regards,

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